

REMARKS

35 U.S.C. 112 Rejections

Claims 1 – 7 and 22 were rejected under 35 U.S.C. 112, second paragraph. In response, claims 1, 3 and 6 have been amended to define the percentage of the ingredients as weight percent. Claims 3 – 6 have also been amended to address the Examiner's rejections. In view of these amendments, it is respectfully submitted that claims 1 – 7 and 22 are patentable under 35 U.S.C. 112, second paragraph.

35 U.S.C. 103(a) Rejections

Claims 1 – 3, 5 – 7 and 22 were rejected as unpatentable under 35 U.S.C. 103(a) by European Patent No. 1,153,997, issued to Brinkman, in view of the "Admitted Prior Art" ("APA") and U.S. Patent No. 3,994,764, issued to Wolinski. Brinkman discloses a hot melt adhesive having a completely different system having different performance and characteristics than the reactive hot melt adhesive of the present invention. In particular, Brinkman discloses a hot melt adhesive that contains a styrene/allyl alcohol component. While the APA states that the performance of reactive hot melt adhesives for most applications may be improved by the addition of acrylic polymers, there is no indication whatsoever that an acrylic polymer would be useful in a system that contains a styrene/allyl alcohol component, such as that of Brinkman. Further, the styrene/allyl alcohol component of Brinkman has, at ambient temperatures, crystalline properties. In the present invention, the use of crystalline ingredients is minimized.

Unlike the one-part adhesive of the present invention, Wolinski discloses a two-part adhesive that requires the use of an activator. Under Wolinski, an activator component is placed on one substrate and an adhesive component is placed on the other substrate. It is only upon combining the two components that an adhesive having a fast green strength is formed. The present invention does not utilize an activator component. Overall, there is no suggestion that an acrylic may be utilized in a system containing a styrene/allyl alcohol or that Brinkman, the APA and Wolinski may be combined. Even if one skilled in the art were to combine Brinkman, the APA and Wolinski, that person would not be led to the present invention. Instead, the result would be a two-part hot melt adhesive requiring the use of an activator and containing styrene/allyl alcohol and acrylic. In view of the distinctions between the present invention and the cited references, it is respectfully submitted that claims 1 – 3, 5 – 7 and 22 are patentable under 35 U.S.C. 103(a) over Brinkman in view of the APA and Wolinski.

Claims 1 – 7 and 22 were rejected under 35 U.S.C. 103(a) as unpatentable over U.S. Patent No. 5,753,747 issued to Oien in view of the APA and Wolinski. The distinctions between Wolinski, the APA and the present invention set forth above are equally applicable to this rejection. Oien discloses a reactive hot melt/sealer composition having a particulate filler. There is no teaching or suggestion of an adhesive such as that of the present invention. Because of these distinctions, one skilled in the art would not be led to the present invention via a combination of Oien, the APA and Wolinski. However, even if one skilled in the art were to combine Wolinski and Yang, that person would not be led to the present invention. Instead, the result would be a two-part adhesive that contains a particulate filler. Thus, in view of the differences between Oien, the APA, Wolinski and the present invention, it is respectfully submitted that claims 1 – 7 and 22 are patentable under 35 U.S.C. 103(a) over Oien in view of the APA and Wolinski.

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance. If there are any issues that the Examiner wishes to discuss, he is invited to contact the undersigned attorney at the telephone number set forth below.

Respectfully submitted



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APPENDIX 1
VERSION WITH MARKINGS TO SHOW CHANGES MADE

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IN THE CLAIMS:

Please amend claims 1 and 3 – 6 as follows:

1. A polyurethane hot melt adhesive composition comprising an isocyanate, from about 10 wt % to about 60 wt % of at least one substantially non-crystalline polyol, and from about 1 wt % to about 30 wt % of a functional acrylic polymer, and which comprises not more than about 10 wt % of a substantially crystalline polyol.
3. The adhesive of claim 2 wherein said at least one non-crystalline polyol polymer comprises a mixture of from about 10 wt % to about 60 wt % of a polyether, up to about 40 wt % of an aromatic polyester, up to about 40 wt % of an aliphatic polyester, and up to about 40 wt % of a polybutadiene.
4. The adhesive of claim 3, [further comprising] wherein the substantially crystalline polyol comprises a crystalline polyester.
5. The adhesive of claim 1 further comprising a [non-functional] non-reactive acrylic.
6. The adhesive of claim 5 which comprises up to about 50 wt % (but not 0 wt %) of said non-reactive acrylic.